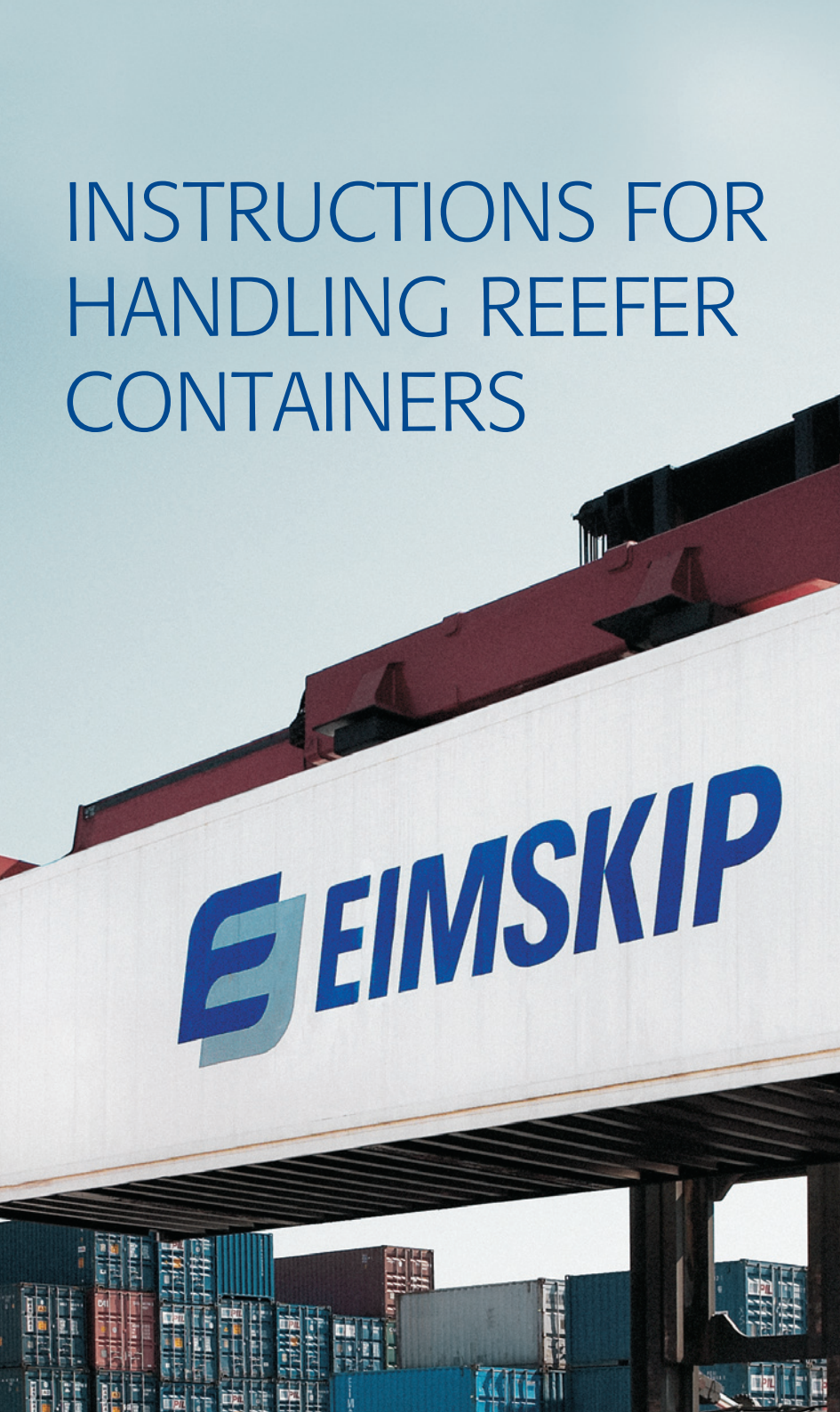
INSTRUCTIONS FOR HANDLING REEFER CONTAINERS



INTRODUCTION

This booklet is intended for all those who work with Eimskip's reefer containers at any stage of the transportation process. In this booklet, the term reefer container refers to a temperature controlled container with a working temperature from -30°C to +25°C.

In our experience, most of the damage that occurs during the transport of frozen or chilled goods in containers is due to mistakes by those who control the process. This does not exclude anyone! For this reason, these instructions are not aimed at anyone in particular. They are intended for all concerned.

Every time some kind of work is carried out involving a reefer container, from preparation for transportation (cleaning and pre-trip inspection) to unloading on Eimskip's or the receiver's premises, it is important that those involved know exactly what their function and responsibilities are. We encourage everyone to study these instructions closely, observe them at all times and always keep them close at hand when working with reefer containers.

If you have any questions or something gets out of hand, please do not hesitate to contact Eimskip's staff who are always ready to provide you with information and advice. (See Chapter 17 – Exceptions).

These instructions are under constant revision. We kindly request everyone involved to send us their comments and suggestions for improvements. Please call Production Management – PRO, tel. 525 7400. These instructions can also be found on the Eimskip website and on the company's intranet.

Although this booklet is primarily intended for Eimskip employees and contractors, it should also benefit our customers and their staff.

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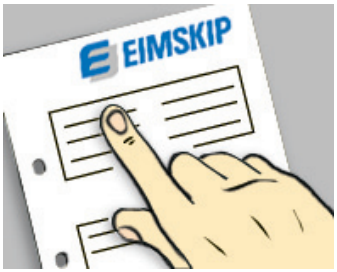
RECEIVING FULL CONTAINER LOADS - FCL

1. Check the container for damages. Damaged units must be rejected if the defects could affect the goods. Have the unit replaced. Register recent damage on the receipt sheet.



2. Make sure that the shipping instructions are present.

3. Connect the container to an electrical power outlet and start the cooling equipment.

4. Check that the following points are in accordance with the shipping instructions and confirm your findings in writing:
   - Temperature reading
   - Temperature setting
   - Ventilation hatch open at/closed

5. Where applicable, check that the recorder functions normally and shows logical information.

6. Check that the recorder disk or sticker is correctly filled in and the required information has been entered (see Chapters 8 and 9).

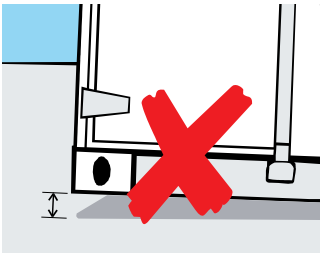
7. Renew the recorder disk if it is outdated or will not last for the remainder of the journey. Send the original disk to Skrifstofuumsjón – FMA, Korngörðum 2, for safe-keeping.

8. Make sure the container is locked and sealed, if appropriate. The seal must be on the left-hand handle on the door to the right (see yellow arrow).

9. Follow instructions about reading probes in frozen goods, if they are available (see Chapter 15).

STUFFING

1. Make sure the container stands on even ground.



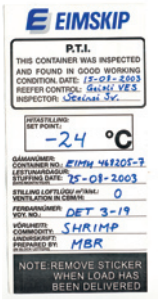
2. Check that you are handling the correct container and/or type of container.

3. Check that the container is clean and undamaged. Reject a container where the contents could be affected by damage, defects or dirt.

4. Check that PTI (pre-trip inspection) has been carried out, not earlier than 60 days prior to your check. If before, the container must be returned for PTI.

5. Check whether there is a blue plastic seal on the container (see Chapter 14).

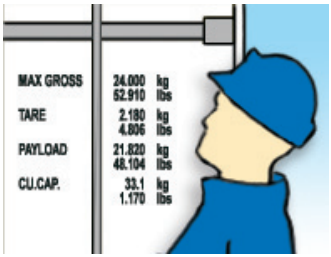
6. Check that the recorder disk is correctly filled in and the requested information given (see Chapter 8). If the information is not present you must provide it. If a recorder is not installed on the container you must fill in a sticker and place it on the engine (see Chapter 9).



7. Make sure the engine is not in operation while loading. It is forbidden to pre-cool a container. Pre-cooling can produce undesirable moisture, causing ice to build up on the condenser and preventing the equipment from functioning properly.

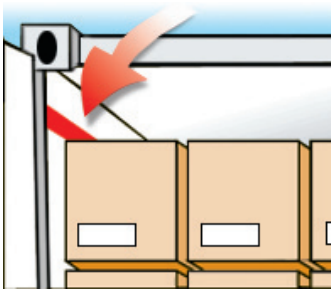
8. Install probes as appropriate (see Chapter 15).

9. Do not overload the container. Check the maximum payload allowed.



10. Check if the following points are in accordance with the shipping instructions:
    - temperature of goods
    - temperature setting
    - ventilation opening

11. Do not load above the red loading line.



12. Make sure that cool air can easily reach all parts of the cargo (see Loading Patterns in Chapter 16).

13. Secure the cargo properly.

14. Close the container and seal it with a bottle seal. The seal should be on the left handle of the door on the right.

15. Connect the container to an electric power source and start up.

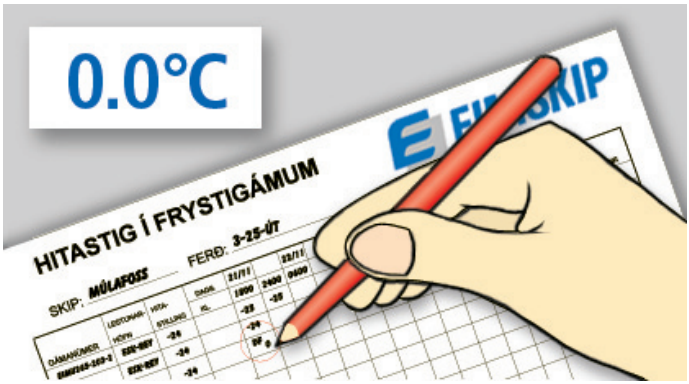
16. Follow the instructions about reading probes for frozen goods, if they are at hand (see Chapter 15).

SUPERVISION

The main points when supervising reefer containers are:

1. A temperature reading should be taken three times every 24 hours, (unless a different schedule has been decided), e.g.
   at 07.00 – 08.00 hrs
   at 15.00 – 16.00 hrs
   at 23.00 – 00.00 hrs
   Readings must be recorded according to regulations and kept on file.

2. Check that defrosting is in order by checking that the temperature reading corresponds to the setpoint. If a container has a recorder, you can see defrosting pulses on the recorder disk. If a container shows constant defrosting at repeated intervals, repairs should be requested.



3. If a container is defrosting at the time of reading, record the temperature on the readout report and mark it with DF (Defrost).

4. If there are abnormal deviations from the setpoint, open the ventilation shaft and check for airflow from the shaft. Little or no flow could indicate ice on the condensor. In this case switch to manual defrosting. Repeat the process if large quantities of water are discharged but the temperature remains incorrect. If these measures have no effect call maintenance.

5. Follow instructions about reading probes in frozen goods, where applicable (see Chapter 15).

6. Check the validity of the recorder disk and replace it if it will expire before the container reaches its destination, or if the container is leaving the custody of the company (see Chapter 8).

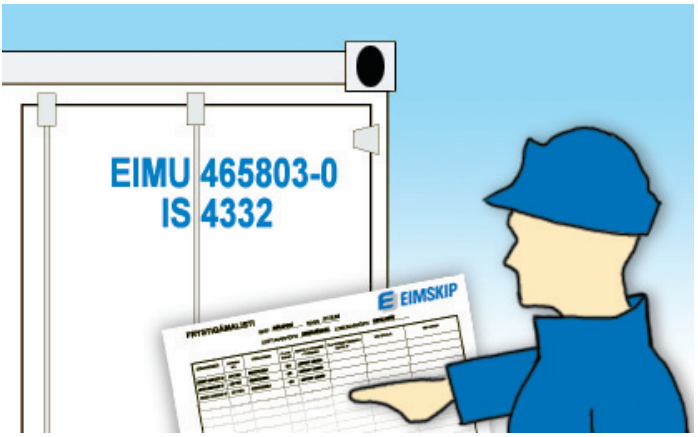
7. Fill in all required information on the new card (see Chapter 8).

8. Send all expired recorder disks to Skrifstofuumsjón – FMA, Korngörðum 2, for safekeeping.

9. If a container has been stored and continously connected for 30 days or more, a run test must be performed.

DELIVERY

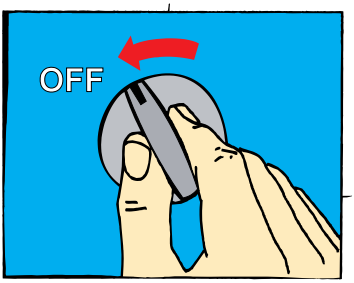
1. Make certain that you are working with the correct container.



2. Check that its temperature is in accordance with the shipping instructions.

3. Make sure that the container is undamaged. If recent damage is found on the container it should be recorded on a damage report.

4. Turn off the motor.

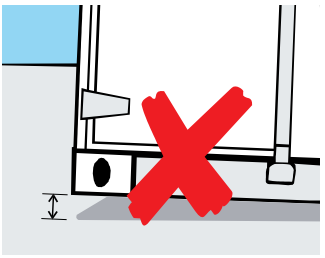


5. Disconnect and roll up the cable.

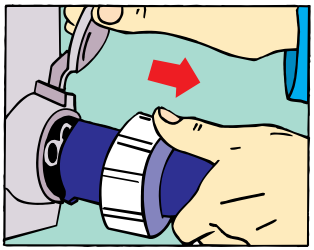
6. Replace the recorder disk before the container leaves the custody of the company. Send the disk to Skrifstofuumsjón – FMA, Korngörðum 2, for safekeeping.

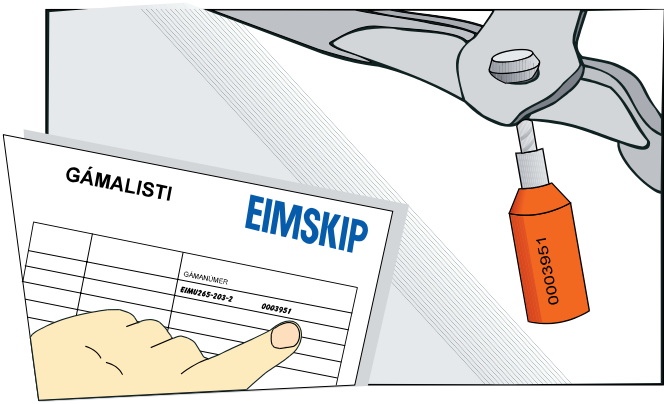
7. Fill in all requested information on the new card (see Chapter 8).

STRIPPING



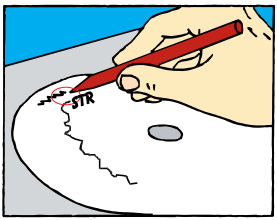
1. Make sure container stands on even ground.
2. Make certain that the temperature is in accordance with the shipping instructions.
3. Turn off the motor.
4. Disconnect and roll up cable.





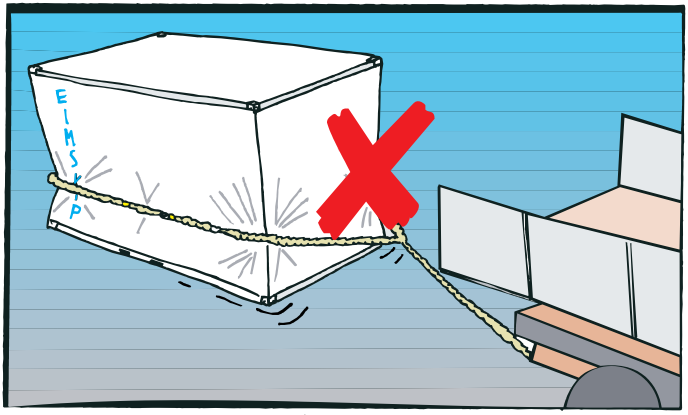
5. Compare the seal number with the container list.

6. Sign "STR" where the needle touches the recorder disk and initial the card.



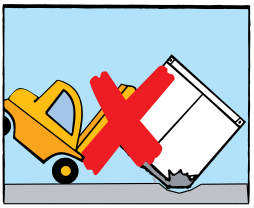
7. Remove the recorder disk and send it to Skrifstofuumsjón – FMA, Korngörðum 2, for safe keeping.

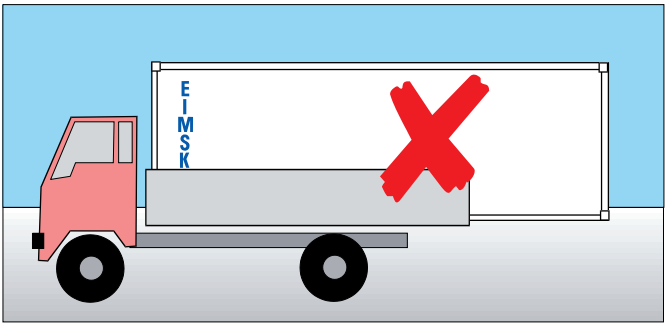
INLAND TRANSPORT



1. Use only appropriate vehicles.

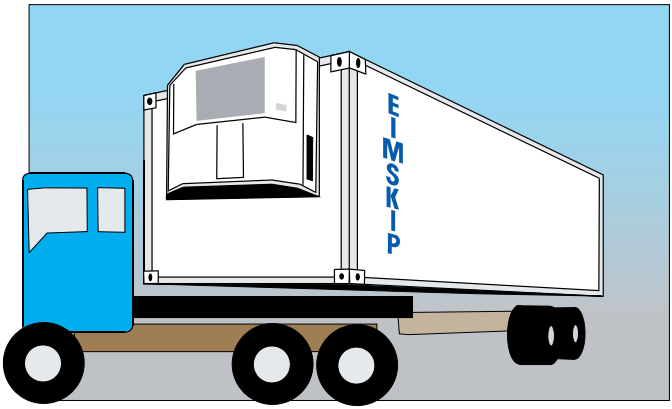
2. Follow instructions about accepting deliveries (see Chapter 2) as appropriate.



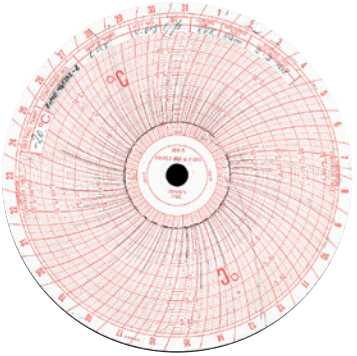


3. Transporting a reefer container for more than 2 hours without a power unit (clip-on or underslung) is prohibited.

4. Follow instructions regarding deliveries (see Chapter 5).



INFORMATION ON RECORDER DISKS



For containers that do not have a recorder disk, the temperature information is entered in the freezing unit's computer memory. The recorder disk has to be filled in according to the following instructions. The sticker mentioned in Chapter 9 must also be filled in.

Information:	Person responsible?
Container no.	The person who carries out the PTI
Setting temp.	The person (or the transporter) stuffing the container
Ship's name	Storage facility, container yard or customer
Voy, no.	Storage facility, container yard or customer
By	The person responsible for stuffing (initials)
Loading port	Storage facility or container yard
Discharge port	Storage facility or container yard
Stuffing date	The person responsible for stuffing the container must adjust the card so that the date and time on the card are correct

CHECKLIST FOR RECORDER DISKS

Pre-Trip Inspection (PTI):
Insert a new recorder disk with the container number. The disk is inserted upside-down. Put the sticker displaying when and where it was inspected on the container motor.

Stuffing:
Turn the recorder disk right side out and enter the correct date and time. Record all required information on disk. Control temperature and ventilation is to be set after stuffing.

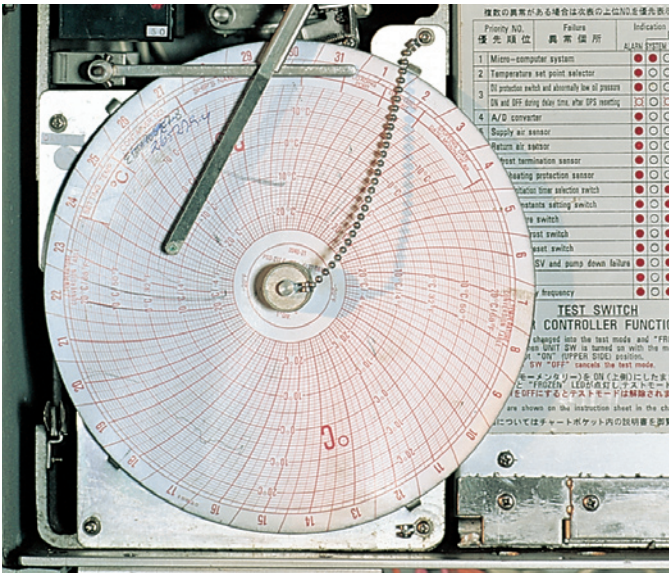
Loading:
Enter name of ship and time on disk.

Unloading:
Enter name of ship and time on disk.

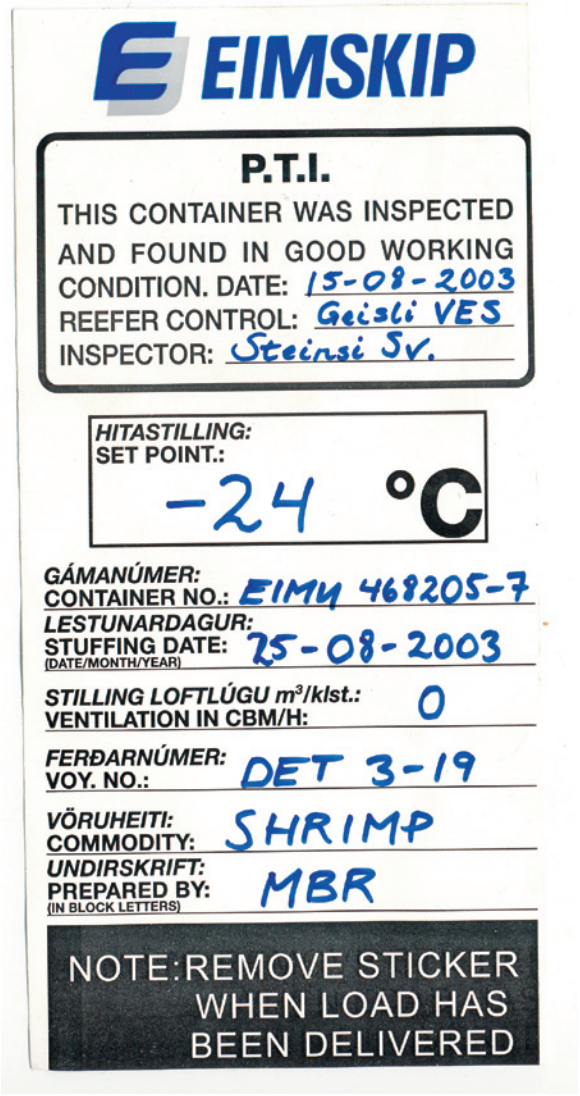
Discharge:
Enter time and initials (ID).

Ventilation hatch:
Enter ventilation settings where appropriate.

Change disk:
The maximum recording time of a recorder disk is 31 days. Changing the recorder disk is vital if the duration of transportation is likely to extend beyond that period of time. The recorder disk should always be changed when the container leaves the custody of the carrier. When the disk is removed, the date and time of removal and the employee's ID should be entered at the end of the last entry. If the expired disk is removed, the container should be inspected by an electrician.



INFORMATION ON STICKERS



EIMSKIP

P.T.I.

THIS CONTAINER WAS INSPECTED AND FOUND IN GOOD WORKING CONDITION. DATE: 15-08-2003
REEFER CONTROL: Geisli VES
INSPECTOR: Steinsi Sv.

HITASTILLING:
SET POINT.:
-24 °C

GÁMANÚMER:
CONTAINER NO.: EIMU 468205-7

LESTUNARDAGUR:
STUFFING DATE: 25-08-2003
(DATE/MONTH/YEAR)

STILLING LOFTLÚGU m³/klst.:
VENTILATION IN CBM/H: 0

FERÐARNÚMER:
VOY. NO.: DET 3-19

VÖRUHEITI:
COMMODITY: SHRIMP

UNDIRSKRIFT:
PREPARED BY: MBR
(IN BLOCK LETTERS)

NOTE: REMOVE STICKER WHEN LOAD HAS BEEN DELIVERED

INFORMATION ENTERED ON STICKERS

Stickers play an important role. They display information about the PTI, when the container was loaded, its destination, the temperature during transport, etc. Sticker must be filled in whether the container is equipped with a recorder disk or not.

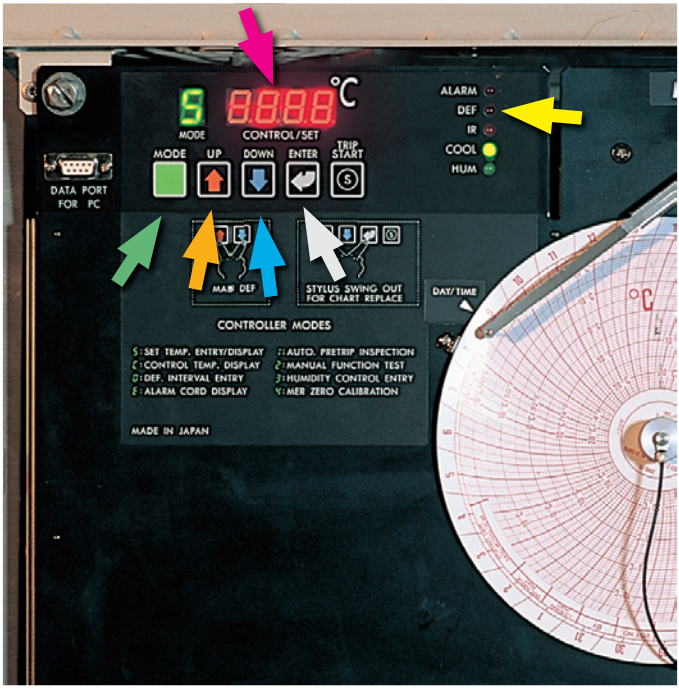
Information	Person responsible
Set point	The person (or the transporter) stuffing the container
Container no.	The person responsible for the PTI
Stuffing date	The person stuffing the container
Ventilation (m^3/hour)	The person stuffing the container
Voy. no.	Storage facility or container yard
Commodity	The person stuffing the container
Prepared by	The person stuffing the container (initials)

MITSUBISHI CPE 15

Temperature controls

1. Press MODE until it the number 5 begins to flash.
2. Press ENTER until CONTROL SET flashes.
3. Then press UP or DOWN until the correct temperature is displayed.
4. Press ENTER.
   Read the SUPPLY/RETURN temperature in MODE 6 (see instructions inside door).

NB: A minus sign (-) in front of the selected temperature indicates freezing. Absence of the minus sign means temperature above zero.



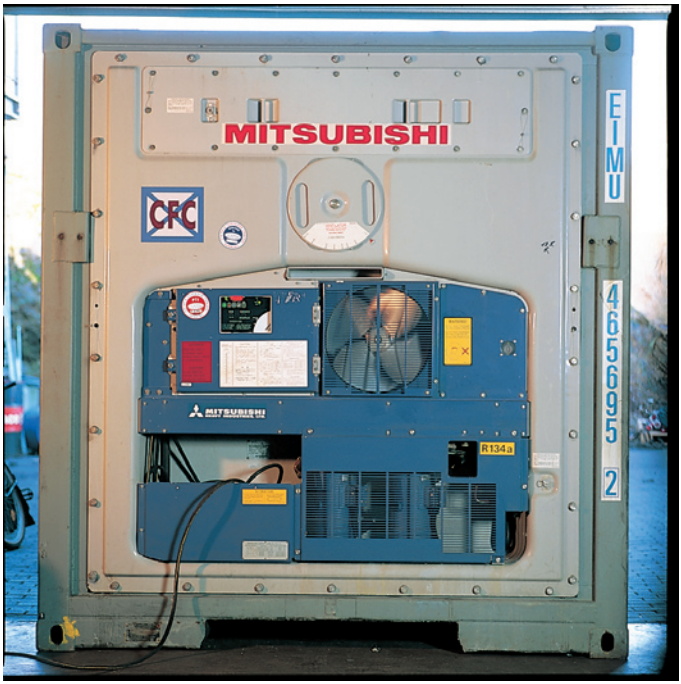
If further information is required, please do not hestitate to contact our Electrical Workshop, tel. 525 7184 or 525 7185.

To start manual defrosting (CPE15).

Press UP or DOWN simultaneously until DEF (DEFROST) lights up (approx. 30 secs).

Recorder (CPE 15)

Records "Supply" temperature of cooling material (-5 and above) and "Return" temperature on freezing.



If container controls are set for freezing the ventilation shaft must always be closed.

SABROE TNE 508 / THERMO KING CRR40

Temperature settings

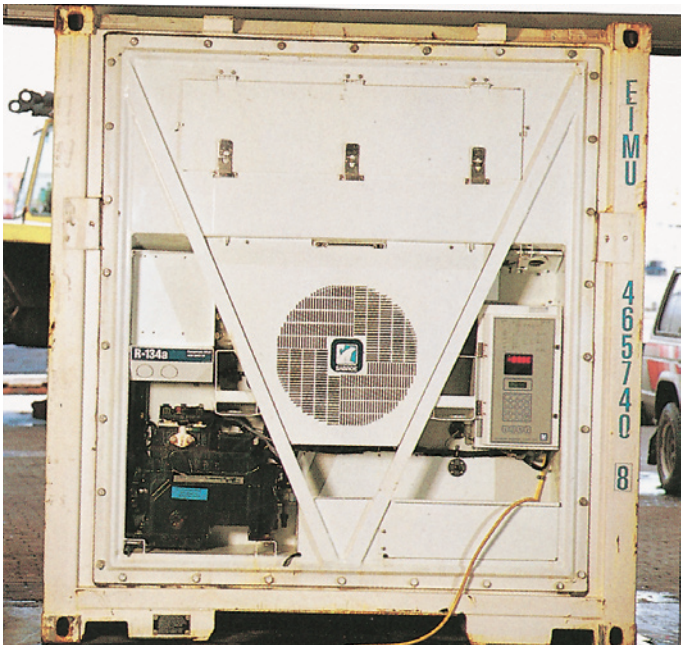
1. Press SETPOINT.
2. Press F4. The indicator should be flashing on the lower screen.
3. Enter the required temperature. Start with EXIT if the temperature is to be below freezing point.
4. Press F4 again and hold until the correct temperature is indicated on the upper screen.

NB: A minus sign (-) in front of the selected temperature indicates freezing. Absence of the minus sign means temperature above zero.

If further information is required, please do not hestitate to contact our Electrical Workshop, tel. 525 7184 or 525 7185.

To start manual defrosting:

Press the DEFROST key.



If container controls are set for freezing the ventilation shaft must always be closed.

DAIKIN LXE10D

Set control temperature:

1. Press UNIT ON/OFF.
2. Wait 18 sec then press SET until SET-SPC appears on the lower panel.
3. Scroll with ▼ or ▲ arrow keys until the desired temperature appears on the upper panel.
4. Press ENTER/ESC to confirm the selection until it appears on the lower panel.

If further information is required, please do not hesitate to consult with Electrical Workshop staff, tel. 525 7184 or 525 7185.

Starting manual defrosting:

Press MANUAL DEFROST to start manual defrosting.

Starting automatic PTI:

1. Press UNIT ON/OFF to start the container machinery.
2. Wait 18 sec. Press the SELECT button until F-PTI appears on the lower panel.
3. Press ENTER/ESC to confirm the selection.

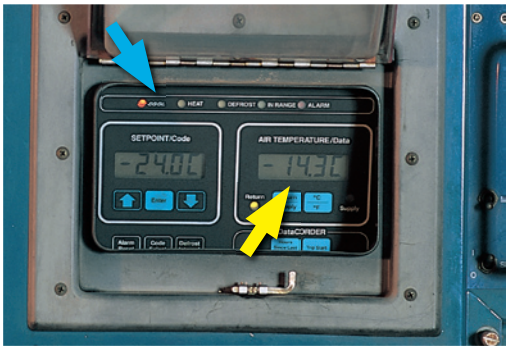
If the container is set to freezing, the ventilation hatch should be closed at all times.

CARRIER 69NT40-511

Set control temperature:

1. Press the arrow keys until the setpoint is at the desired temperature.
2. Arrow up increases temperature. Arrow down decreases temperature.
3. Press ENTER when the desired temperature is set.
4. The set temperature appears in the window on the left.

NOTE: If there is no minus sign (-) in front of the number, the container is set to heat.



OLDER VERSION

NEWER VERSION

If further information is required, please do not hesitate to consult with Electrical Workshop staff, tel. 525 7184 or 525 7185.

Switching to manual defrost:

Press the MD (Manual Defrost) button on the control box.

Read from the "Return" and "Supply" probes:

Press RETURN SUPPLY switch.

Recorder disk (if applicable) logs "Return" temperature.

If the container is set to freezing, the ventilation hatch should be closed at all times.

SEALS AND STICKERS

Yellow seal

Meaning: Clean on the inside, intact, frames in place, ready for PTI inspection.

Sealed by Container Inspection, Metal Workshop and Warehouses.

Blue seal

Meaning: The container has not been opened since the last PTI inspection.

Sealed by Electrical Workshop.

Green seal

Meaning: Clean on the inside, intact, frames in place, ready for PTI inspection.

Sealed by agents.

Bottle seal

Meaning: Stuffed container, ready for transportation.

Sealed by Cold and Frozen Storage, container yard, customers, drivers or agents.

If further information is required, please do not hesitate to consult with Electrical Workshop staff, tel. 525 7184 or 525 7185.

THIS CONTAINER
WAS PRE-TRIP INSPECTED AND FOUND IN GOOD WORKING CONDTION. DATE: 08.12.04
EIMSKIP
REEFER CONTROL INSPECTOR: Árni

White label with blue letters and border

Meaning: The container has been pre-trip inspected and is ready for use if the date is within the last 60 days.

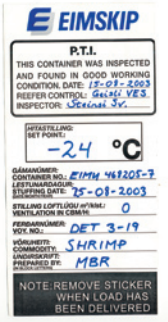
Filled out by: Electrical Workshop.

THIS CONTAINER
WAS PRE-TRIP INSPECTED AND FOUND IN GOOD WORKING CONDTION. DATE: 08.12.94
EIMSKIP
REEFER CONTROL INSPECTOR: Árni

Yellow label with blue letters and border

Meaning: The container has been pre-trip inspected and is ready for use if the date is within the last 60 days.

Filled out by: Agent's electricians.



White, oblong label with black letters

Meaning: The container has been pre-trip inspected and is ready for use if the date is within the last 60 days.

Filled out by: Electrical Workshop, agent's electricians. Refer to filling out guidelines in Chapter 9.

Red label with white letters

Meaning: The container is out of order, requires extensive repairs.

If the container is set to freezing, the ventilation hatch should be closed at all times.

14
15
16
17

PROBES IN FROZEN GOODS

Reading probes

Read probes 1 and 2 in Carrier 69NT40 according to the following guidelines:

1. Open lid on control panel.
2. Press the button CODE SELECT until CD- and a number appears on a panel above the button.
3. Scroll arrow keys up or down until the number 21 appears on the panel. The temperature of PROBE 1 appears in a panel to the right on the control panel.
4. Repeat function 1-3 using the number 22 instead of 21 for PROBE 2. The numbers automatically disappear from the panel in approximately 15 sec.

Read probes in Carrier Microlink 2 and 3 according to the following:

1. Open lid on control panel.
2. Press button ALT MODE and then ENTER.
3. Press arrow keys, up or down, until the number dc 14 appears on the panel.
4. Repeat functions 2-3, using the number dc 5 instead of dc 14.

Read probes in Sabroe TNE 508 according to the following:

1. Press ESC. A menu should appear on the panel.
2. Press arrow keys, up or down, until "Datalogger" appears on the panel.
3. Press F4 until "Insert Temp Log" appears. Press F4 again until: PROBE no. 1., PROBE no. 2., PROBE no. 3 appears. If no probe is connected OPEN is seen on the panel.

The first probe readout should take place within 2 hours of stuffing and no later than 4 hours after departure from loading port.

Readouts from probes 1 and 2 should be logged on a separate form and placed in the pocket in the recorder disk compartment.

Connecting probes to the container's microprocessor

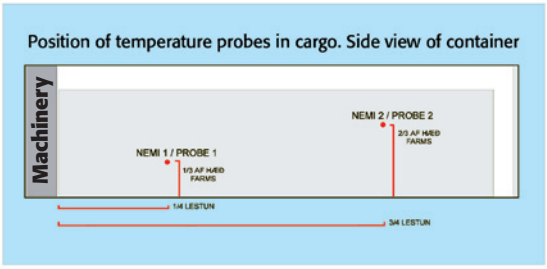
The probes are connected to the container's microprocessor by receptacles located inside the container, behind the shield. The receptacles are labelled "PROBE 1" and "PROBE 2" in Carrier 69NT40 and Sabroe TNE 508. In Carrier Microlink 2 the receptacles are labelled "PROBE 4" (Cargo) and "PROBE 3".

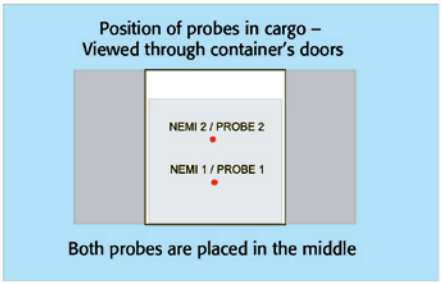
Conduct the cables from under the floor shield after assembly.

Placing probes in product

"PROBE 1" When the container has been stuffed to one quarter of its capacity "PROBE 1" (PROBE 4) is placed in the middle of the container, at one-third the height of the load.

"PROBE 2" When the container has been stuffed to three-quarters of its capacity, "PROBE 2" (PROBE 3) is placed in the middle of the container, at approximately two-thirds the height of the load.


Position of temperature probes in cargo. Side view of container
Machinery
NEMI 2 / PROBE 2
NEMI 1 / PROBE 1
1/4 LENGTH
3/4 LENGTH


Position of probes in cargo –
Viewed through container's doors
NEMI 2 / PROBE 2
NEMI 1 / PROBE 1
Both probes are placed in the middle

STOWAGE PATTERNS

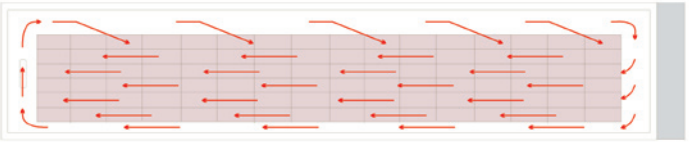
Frozen cargo should be loaded to ensure that:

- air circulation is guaranteed
- the product is properly secured

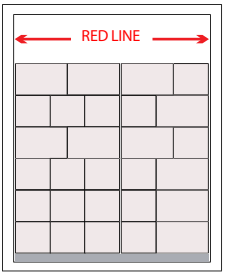
Air circulation must not be obstructed in any way, either above, below, on either side of the load, or by the door. Make sure that there is no space between shipping units in the container, in order to ensure proper ventilation.

When loading fruit and vegetables, all cargo needs to be fully ventilated and the ventilation hatch correctly adjusted.

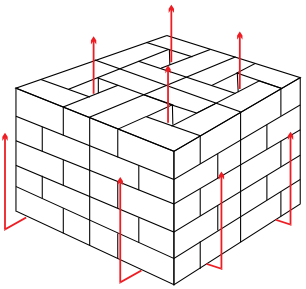
Ventilation of frozen product



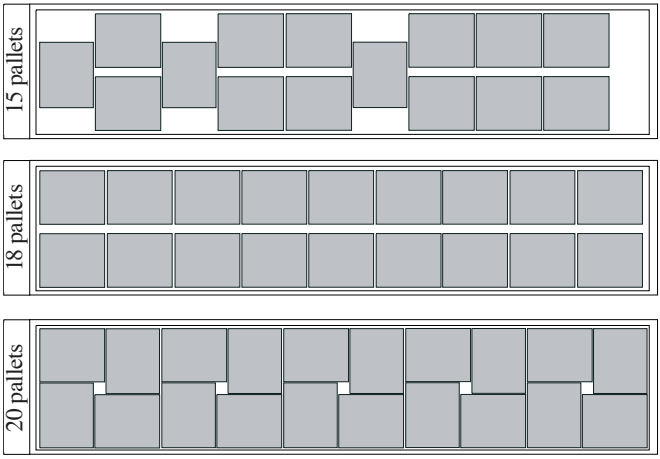
Ventilation of chilled product



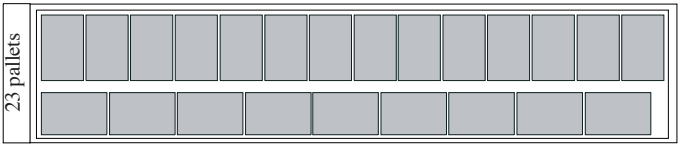
Loading of frozen product



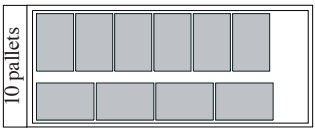
Loading of chilled product



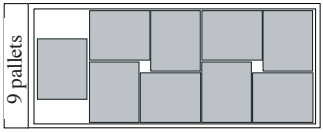
Loading of cold product
Arrangement of 1000x1200 mm pallets in a 40 ft. reefer container, ensuring even distribution of weight.



Arrangement of 800x1200 mm (EURO) pallets in a 40 ft. reefer container.



Arrangement of 800x1200 mm (EURO) pallets in a 20 ft. reefer container.



Arrangement of 1000x1200 mm pallets (EURO) in a 20 ft. reefer container.

NEED ASSISTANCE?

Refrigerating machinery and container function

Dept	Tel.	Emergency tel.	Fax
Hours: 8:00 – 24:00 on weekdays			
Electrical Workshop – ELW	+354 525-7184	+354 825-7182 +354 525-7182	+354 525-7189
Reefer Inspection		+354 525-7185	

Shipping Instructions

Dept.	Tel.		Fax
Export Department – EXP	+354 525-7240	+354 525-7249	
Import Department - IMP	+354 525-7260	+354 525-7269	

Frozen Product

Dept.	Tel.	Emergency tel.	Fax
Sundafrost Reefer Store WRE	+354 525-7430	+354 825-7431	+354 525-7439

Road Transport, transportation consulting

Dept.	Tel.
Production Management – PRO	+354 525-7400
Eimskip innanlands ELT	+354 525-7700

Bacalao, fish-roe and other export products

Dept.	Tel.	Vaktsími	Fax
Cargo Distribution Centre	+354 512-7610		
Cold Store – WCS	+354 525-7463	+354 825-7461	+354 525-7568

Exceptions – Problems

Night and holiday watch at Sundahöfn, tel. 525-7100.

Watchman at Sundahöfn has a list of telephone numbers that may be useful.

Every employee of EIMSKIP is "on call", if cargo damage is impending and needs to be prevented.

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